ABSTRACT

This paper seeks to explore the concept of the digital divide by critiquing the notion of the digital native and its relationship to the legal conception of technology transfer and sited knowledge. It is the contention of this paper that technology transfer is key in developmental issues currently facing the international community in general, and is the first and paramount step in bridging the digital divide specifically. In order to be sustainable, a technology transfer must include capacity building strategies in which the notion of suitably embedded knowledge is already present in other areas of international IP law; specifically in the areas of Traditional Knowledge (TK) and Traditional Cultural Expression (TCE). Finally, if this concept of embedded knowledge is further applied to the idea of the digital divide then it becomes apparent that there is a socially damaging and a potentially ecologically unsound digital divide at work, even among those who are resource rich.

Keywords: Autopoiesis, Capacity Building, CBD, Development, Digital Divide, Trips

THE THEORY OF AUTOPOIESIS

Since autopoietic theory underpins the observations made in this work it is appropriate to begin by exploring that theory and how it can be applied to law. Although we shall leave highlighting how it impacts upon the area of capacity building and technology transfer to a suitable place in the text, it is hoped that holding this body of theory in mind will facilitate the reader in tracing the author’s argument.

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For All of Our Languages We are Not Natives Here: Challenging the Idea of the Digital Native, Rethinking the Digital Divide

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Autopoiesis in General

As a theory autopoiesis was first posited in the biological sciences to differentiate between the living and the non-living (Varela & Maturana, 1974). It is an explanatory theory of how entities develop and govern themselves. The influential scholar Luhmann (1986) accomplished an interesting “theory transfer” into the world of sociology; he posited the idea that self-organising and self-reproducing social systems (autopoietic systems) reproduce and maintain their structure not because of the characteristics of individuals, the demarcation...
of specific roles, or even through deliberate acts but via their process of communication. This is particularly interesting when one is considering that this means that systems can be self-referential. In other words they can communicate about their communications and develop themselves reflectively in that way.

In relation to social systems autopoiesis allows us suggest that all that can ever accurately be observed is the system’s communications and that through this observation, by learning to understand its language or, to use Luhmann’s preferred term, the “code” it employs we can work out what a system’s function is. This “code” can then develop into a “program” (a series of expressions in that language) which expand and solidify it, making it possible to do things with the code. Finally, when we examine this program we can determine what effects it has in practice, what Luhmann calls its “efficiency”. Ultimately, the largest and most successful social systems outgrow simple language expressions and develop their own sphere or “medium” of communication. Social systems, such as law, form part of society as we experience it and are both influential upon and influenced by their surrounding social systems. However, they can also be said to be independent from them since they depend upon their own code and media for interpreting (or perhaps more correctly creating) their own environments and their own organs. Thus, what we commonly call society is made up of open yet also discrete social systems. This discreteness is often described as meaning that the system is operationally closed, in other words, that the “realness” of anything within the system depends on its absorption or adherence to the code of that system. So, for example, if I go back to the sweet shop mentioned earlier my doctor or dentist might well happen to be on the scene to disrupt my quiet enjoyment of my chocolate bar for health reasons but any communication coming from them will not affect the legal medium. They will not have legal jurisdiction (the ability to label my actions as legal or illegal) unless they as communicators have already been absorbed into the legal realm. This is a very important distinction. Luhmann himself highlights it:

I think that the theory of autopoiesis and the theory of autopoietic systems...are underestimated in the radicalism of this approach. This radicalism goes back to the hypothesis of operational closure. This hypothesis implies a radical shift in epistemology, and also the ontology it supposes. If one accepts it and also relates it to the concept of autopoiesis and treats the latter as a further formulation of operational closure, then it is clear that it also breaks with the epistemology of the ontological tradition that assumed that something of the environment enters the understanding and that the environment is represented, mirrored and imitated or simulated within a cognizing system. In this respect the radicalism of the new approach can hardly be underestimated (Luhmann, 2002, p. 114).

**Autopoiesis and Law**

Up to this point we have merely been using law as the exemplar to illustrate our broader understanding of autopoietic social systems, now we shall consider briefly the work which has looked at autopoiesis and law specifically. The key issue for law as an autopoietic system is to manage inter-system conflicts—that is after all part of the function and efficiency of law.
Digital Divide, Data Trash, and the Commodification of Information: Discourses around the Digital Divide
www.igi-global.com/chapter/digital-divide-data-trash-and-the-commodification-of-information/172391?camid=4v1a

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